## 43

## www.biodiversityjournal.com

ISSN 2039-0394 (Print Edition) ISSN 2039-0408 (Online Edition)

with the support of



## Biodiversity Journal

JUNE 2021, 12 (2): 275-536

## FOR WILDLIFE RESEARCH AND ENVIRONMENTAL STUDIES



Abies nebrodensis (Lojac.) Mattei, 1908 - Madonna degli Angeli Valley (Polizzi Generosa, Madonie, Sicily, Italy)

BIODIVERSITY JOURNAL 2021, 12 (2): 275-536

Quarterly scientific journal edited by Edizioni Danaus, via V. Di Marco 43, 90143 Palermo, Italy www.biodiversityjournal.com biodiversityjournal@gmail.com

Official authorization no. 40 (28.12.2010)

ISSN 2039-0394 (Print Edition) ISSN 2039-0408 (Online Edition)

https://doi.org/10.31396/Biodiv.Jour.2021.12.2.I.II

Abies nebrodensis (Lojac.) Mattei, 1908 (Pinacee Pinales). It is better known as Fir of the Madonie or formerly Fir of Nebrodi, a species of fir endemic to N-Sicily and in particular to the Madonna degli Angeli Valley (Polizzi Generosa, Madonie, Palermo). It was once distributed throughout the mountain range of N-Sicily. According to the IUCN, it is classified as critically endangered, even if the population (of about 30 adult specimens) is stable and slowly but gradually increasing. In 2000, the Madonie Park created a Life Nature aimed at expanding the range of the species and therefore guaranteeing its conservation. About 3000 specimens are also grown in the Botanical Gardens of S-Italy and Sicily. The genus Abies includes 48 species distributed in the Palearctic region and is represented in Europe mainly by A. alba, but in some mediterranean mountain ranges there are other paleoendemic species such as A. nebrodensis. It is thought to have originated from the geographical isolation of A. alba in Sicily, although other studies show that A. nebrodensis is almost identical to A. numidica. Abies nebrodensis are evergreen trees, 10-15 m tall, monoecious, generally characterized by conical-pyramidal foliage. The stem is monopodial with the branches growing according to an annual spiral pattern. The branches are extremely regular verticillated and arranged on a horizontal plane. The bark is smooth in young specimens, wrinkled in adults. The needles are lanceolate with concave tip, flat, with two whitish bands of stomata on the underside. They persist for 5 or more years. Male strobili, which appear in spring, have a globular or conical shape, are hanging and red in color. The female cones, 20 cm long, of ovoid-cylindrical shape grow straight on the annual twigs and mature in one season. After the dispersion of the seeds, the central part remains erect like a thorn on the branch. The seeds have a winged part. The wood of A. nebrodensis, like that of A. alba, has excellent technological characteristics and was used for many works in antiquity.



Arturo Viviano - Via M. Cipolla n. 106, Palermo, Italy; vivix945@gmail.com